Cyprinus ilishaestomus
Ecological Risk Screening Summary

Web Version – 10/01/2012

Photo: Hu and Liu 2008

1 Native Range, and Status in the United States

Native Range
From Zhao (2011):

"The species is an endemic fish to China and distributed only in Qilu Lake, Yunnan province. It has not been seen since the late 1970s when an individual specimen was collected (W. Zhou pers. comm [not cited])."

Status in the United States
No known nonindigenous occurrences.

Means of Introductions to the United States
No known means of introductions.

2 Biology and Ecology

Taxonomic Hierarchy and Taxonomic Standing
From ITIS (2011):

Kingdom Animalia

Phylum Chordata
Subphylum Vertebrata
Superclass Osteichthyes
Class Actinopterygii
Subclass Neopterygii
Infraclass Teleostei
Superorder Ostariophysi
Order Cypriniformes
Superfamily Cyprinoidea
Family Cyprinidae
Genus Cyprinus
Species *Cyprinus ilishaestomus*

Taxonomic Standing: valid

Size, Weight, Age

From Froese and Pauly (2011): "Max length: 30.0 cm NG male/unsexed; (Wang 1998); common length: 17.0 cm NG male/unsexed; (Wang 1998)"

Environment

From Froese and Pauly (2011): "Freshwater; benthopelagic "

Climate/Range

From Froese and Pauly (2011): "Subtropical"

Distribution

From Froese and Pauly (2011): "Asia: Qiluhu Lake in Yunnan, China."

Short description

From Froese and Pauly (2011):

"Body yellowish green on top of body, gradually pale downwards and silvery white on abdomen. Snout long and front of nostrils markedly convex; lower jaw slightly more protruded than upper one. "

Biology

From Froese and Pauly (2011):

"Dwells mainly in deep water with aquatic plants. Feeds mainly on shrimps, small fishes and some aquatic plants (Wang 1998)."

Human uses

None reported.

Diseases
None reported.

Threat to humans
From Froese and Pauly (2011): "Harmless"

3 Impacts of Introductions

No impacts of introductions

4 Global Distribution

Figure 1 (above). *Cyprinus ilishaestomus* historically occurred in Yunnan province of China and Lake Qiluhu. Map from Google Earth (2011).

5 Distribution within the United States

No distribution within the United States

6 CLIMATCH

Summary of Climate Matching Analysis
The climate match (Australian Bureau of Rural Sciences 2011; 16 climate variables; Euclidean Distance) was low throughout the United States and medium in Florida. Climate 6 match indicated that the Continental U.S. has a low climate match. The range for a low climate match is 0.0 – 0.005; the climate match for *Cyprinus ilishaestomus* is 0.001.

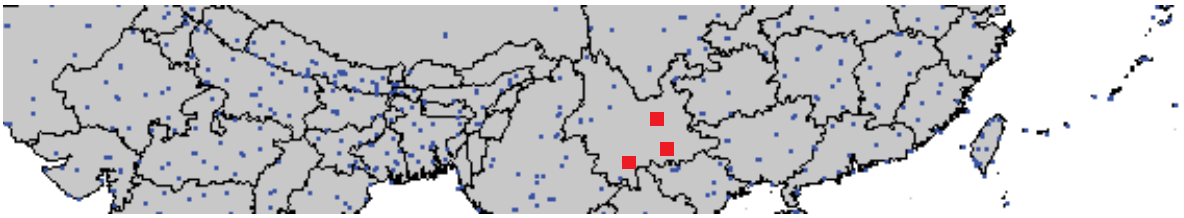

Figure 2 (above). CLIMATCH (Australian Bureau of Rural Sciences 2011) source map showing weather stations selected as source locations (red) and non-source locations (blue) for *Cyprinus ilishaestomus* climate matching. Source location from Zhao (2011).

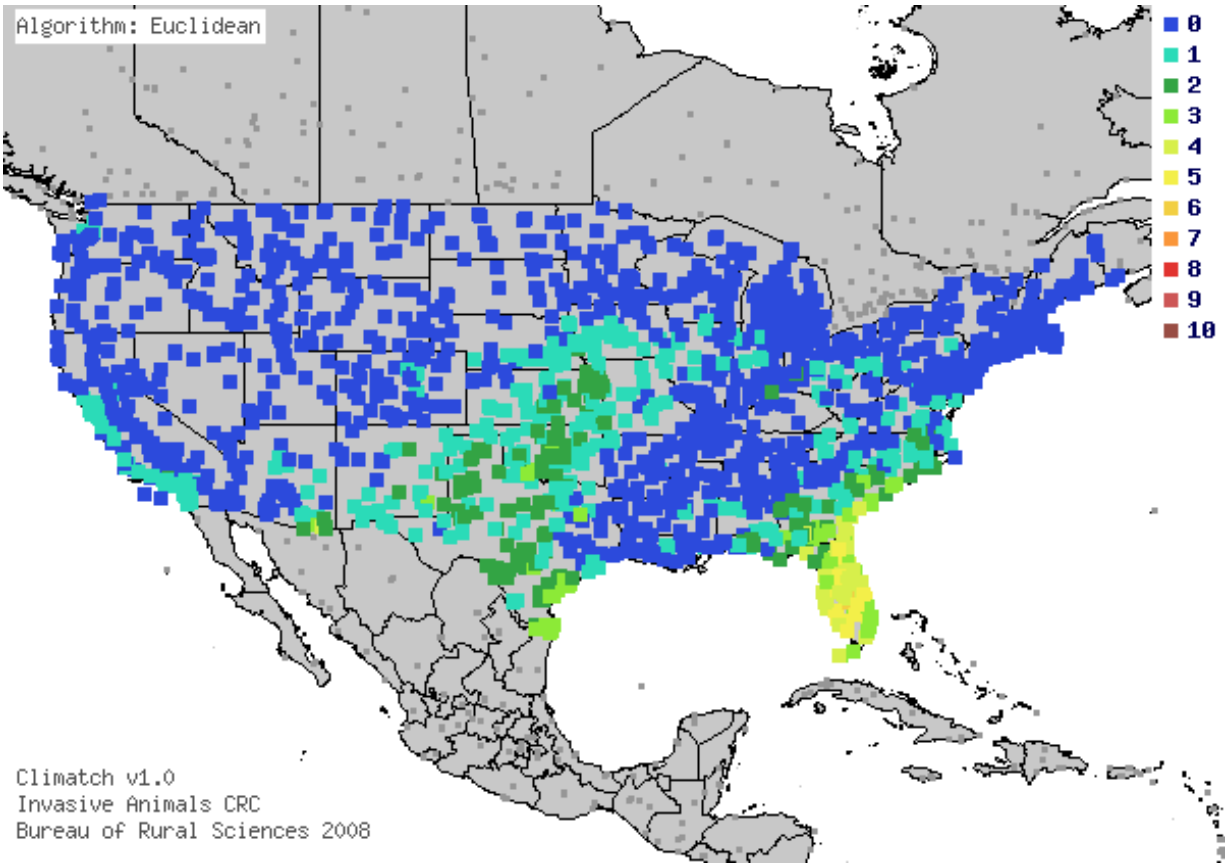

Figure 3 (above). Map of CLIMATCH (Australian Bureau of Rural Sciences 2011) climate matches for *Cyprinus ilishaestomus* in the continental United States based on source location from Zhao (2011). 0= Lowest match, 10=Highest match.

Table 1 (below). CLIMATCH (Australian Bureau of Rural Sciences 2011) climate match scores.

CLIMATCH Score	0	1	2	3	4	5	6	7	8	9	10
Count	1268	378	176	63	51	20	2	0	0	0	0
Climate 6 Proportion = 0.001 (L)											

7 Certainty of Assessment

Peer-reviewed literature on the biology, ecology, and distribution associated with *Cyprinus ilishaestomus* as well as information on its potential invasiveness is limited. More information and research on this species will be needed to strengthen the certainty of this assessment. The risk level is therefore uncertain, and the certainty of this risk is low.

8 Risk Assessment

Summary of Risk to the Continental United States

The overall risk assessment category for *Cyprinus ilishaestomus* is uncertain. This is due to a low climate match, a restricted distribution, no record of this species being introduced outside its native range, and no history of invasiveness.

Assessment Elements

- **History of Invasiveness (Sec. 3):** Low
- **Climate Match (Sec. 6):** Low
- **Certainty of Assessment (Sec. 7):** Low
- **Overall Risk Assessment Category:** Uncertain

9 References

Note: The following references were accessed for this ERSS. References cited within quoted text but not accessed are included below in Section 10.

Australian Bureau of Rural Sciences. 2011. CLIMATCH. Available: http://adl.brs.gov.au:8080/Climatch (Accessed September 2011).

Froese, R. and D. Pauly (Eds). 2011. *Cyprinus ilishaestomus*. FishBase. Available: http://www.fishbase.org/summary/Cyprinus-ilishaestomus.html (Accessed September 2011).

Google Inc. 2011. Google Earth (Version 6.0.3.2197) [Software]. Available: http://www.google.com/intl/en/earth/index.html (Accessed August 2011).

ITIS. 2011. *Cyprinus ilishaestomus*. Integrated Taxonomic Information System. Available: http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=688957 (Accessed September 2011).

Zhao, H. 2011. *Cyprinus ilishaestomus*. In: IUCN 2012. IUCN Red List of Threatened Species. Version 2012.1. Available: http://www.iucnredlist.org/details/full/166099/0 (Accessed September 2012).

10 References Quoted But Not Accessed

Note: The following references are cited within quoted text within this ERSS, but were not accessed for its preparation. They are included here to provide the reader with more information.

Hu, G.F. and X.J. Liu. 2008. Threatened fishes of the world: *Cyprinus ilishaestomus* (Chen & Hwang 1977) (cyprinidae). Environmental Biology of Fishes. 84(3): 259.

Wang, S. 1998. China red data book of endangered animals. Pisces. National Environmental Protection Agency. Endangered Species Scientific Commission. Science Press, Beijing, China. 247p.